CHAPTER 6

CONCLUSION

6.1 SUMMARY OF THE STUDY

In this study, the prevalence of periodontitis, in the various phases of a woman’s life was studied. The subjects were categorized appropriately into puberty, pregnancy and menopausal groups. A total of 437 subjects were studied. The oral hygiene status was individually recorded. The microbial flora was ascertained.

We found that the incidence of periodontitis increased in the second trimester to 87.5% (105 out of 120) from the first trimester 32.5% (39 out of 120). In mothers who had periodontitis at the time of delivery, the incidence of pre term birth and Low birth weight were more when compared to the ones who did not have periodontitis. One reason for Pre Term Birth and Low Birth Weight is the secretion of the endotoxin by the periodontal bacteria. These endotoxins stimulate the secretions of cytokines and also prostaglandins. The endotoxins when present above a certain level can induce labor.

In the subset of adolescent girls rapid increase in the percentage of periodontitis was seen from prepubertal stage to postpubertal stage. Among prepubertal stage the percentage of periodontitis was 13% (4 out of 30). Among pubertal and post pubertal stage, the percentage of periodontitis was 52.7% (29 out of 55) and 61.8% (34 out of 55) respectively.

Among aerobic bacteria Staphylococcus sp.(p value=0.04), Streptococcus mutans (p value= 0.001), Enterococcus sp (p value= 0.001), Lactobacilli sp. (p value=0.001) and Neisseria catarrahalis (p value=0.001) showed statistical significance. Among anaerobic bacteria Stomatococcus sp., Prevotella sp. and Porphyromonas sp. showed p value of 0.001 which is statistically significant. It can be concluded from this study that there is a shift of the normal oral flora to the anaerobic periodontal bacteria in each study group.
Oral Hygiene Index-Score showed, oral hygiene was better among Pre menopausal women when compared to Post menopausal women. 83% (83 out of 110) of pre menopausal women had good oral hygiene index while among post menopausal women it decreased to 32% (32 out of 110). This result was statistically significant with p value of 0.001. From the current result it can be noted that Post menopausal women is more prone to periodontal related problems when compared to Pre menopausal women. This can be due to various factors mainly a decrease in the estrogen level.

6.2 CONCLUSIONS DRAWN FROM THE STUDY

In this study we found that the incidence of periodontitis increased in the second trimester. In mothers who had periodontitis at the time of delivery, the incidence of pre term birth and Low birth weight were more when compared to the ones who did not have periodontitis.

In this study, we found that there is a shift of the normal oral flora to potentially pathogenic strains, during all the phases of womenhood. Among aerobic bacteria Staphylococcus sp, Streptococcus mutans, Enterococcus sp, Lactobacilli sp. were found more commonly. Among anaerobic bacteria Stomatococcus sp., Prevotella sp. and Porphyromonas sp. showed more presence. Such changes were more pronounced during the fertile period and in menopausal period. This situation warrants active surveillance and attention during these phases of a woman’s life.

6.3 LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR THE FUTURE

The study is limited by the small number of samples. When the standard formula for sample size calculation was applied, the total number of collected subjects was adequate. However, the number of subjects in one subset viz. the oral contraceptive group was only twelve. Hence, a larger study with more numbers within this subset may be in order.